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Net Series

NTQ123

70 - 120 Watts

Jameco Part Number 196701

Total Power	*70 - 120 Watts*
Input Voltages	*85 - 264VAC*
# of Outputs	*Quad*

SPECIAL FEATURES

- Active power factor correction
- EN61000-3-2 compliance
- Remote sense on outputs one and two
- Power fail and remote inhibit
- Single wire current sharing on outputs one and two
- Adjustable main outputs
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection

ENVIRONMENTAL

Operating temperature: 0° to 50°C ambient; derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: Designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11 Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.7 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ± .04% per °C

MTBF demonstrated: >1 million hours at full load and 25°C ambient conditions

ELECTRICAL SPECIFICATIONS

Input

Input range	85-264 VAC
Frequency	47-63 Hz
Inrush current	38 A max., cold start @ 25°C
Efficiency	65% typical at full load
EMI filter	FCC Class B conducted and radiated, CISPR 22 Class B conducted and radiated, EN55022 Class B conducted and radiated, VDE 0878 PT3 Class B conducted and radiated.
Power factor	0.99 typical
Safety ground	
Leakage current	<0.75 mA @ 50/60 Hz, 264 VAC input

Output

Maximum power	70 W convection, 120 W with 30 CFM forced air
Adjustment range	±5% minimum on outputs one and two
Hold-up time	20 ms @ 120 W load, 120 VAC input
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	3.3 V and 5 V output: 20% to 35% above nominal output

Logic Control

Power failure	TTL logic signal goes high 100-500 msec after 5 V output; it goes low at least 4 msec before loss of regulation
Remote Inhibit	Requires an external TTL Signal to inhibit outputs
Remote sense	Compensates for 0.5 V lead drop minimum, will operate without remote sense connected. Reverse connection protection.

SAFETY

VDE	0805/EN60950 (IEC950)	21310-3336-0004
UL	UL1950	E186249
CSA	CSA 22.2-234 Level 3	LR109492C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P98100870
BABT	EN60950/EN41003	608497
CB	Certificate and report	5009
CE	Mark (LVD)	

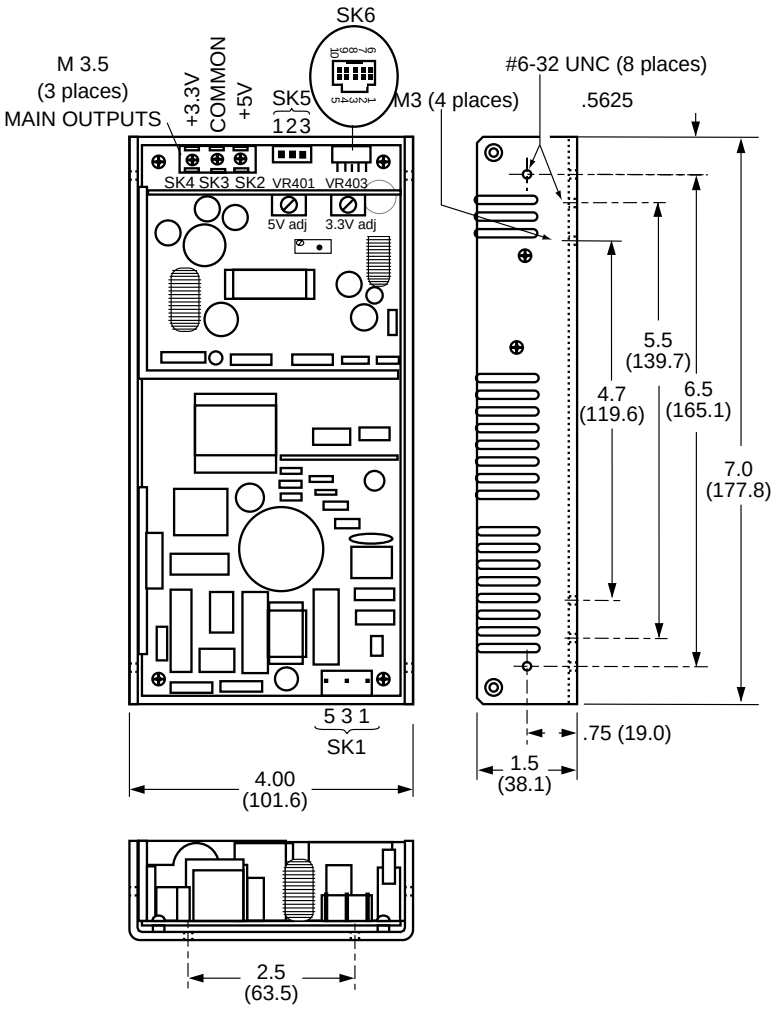
ASTEC

ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
NTQ123	+3.3 V	0 A	14 A	25 A	28 A	±2%	50 mV
	+5 V	2 A	12.5 A	24 A	28 A	±2%	50 mV
	+12 V	0 A	1 A	2 A	4 A	±3%	120 mV
	-12 V	0 A	0.5 A	1 A	1.5 A	±3%	120 mV

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
4. Minimum loads are required. In parallel minimum loads are 2.5 A on the 5 V output and 1 A on the 3.3 V output.

DRAWINGS



PIN ASSIGNMENTS

Connector		
SK1	PIN 1	Ground
	PIN 3	Neutral
	PIN 5	Live
SK5	PIN 1	+12 V
	PIN 2	Common
	PIN 3	-12 V
SK6	PIN 1	3.3 V SWP
	PIN 2	-3.3 V Sense
	PIN 3	+3.3 V + Sense
	PIN 4	5 V SWP
	PIN 5	COMMON
	PIN 6	+5 V Sense
	PIN 7	-5 V Sense
	PIN 8	+ Inhibit
	PIN 9	- Inhibit
	PIN 10	Power Fail

MATING CONNECTORS

(SK1) AC Input:	Molex: 09-50-8051 (USA) Molex: 09-91-0500 (UK) PINS: 08-58-0111
SK2,3,4:	Molex BB-124-08
(SK5) ±12V	Molex:09-50-8031 (USA) Molex: 09-91-0300 (UK) PINS: 08-58-0111
(SK6) Control Signals:	Molex: 90142-0010 PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8

Astec Connector Kit #70-841-012

NOTES

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance ±.02".
3. Remote inhibit requires an external 5 V @ 10 mA to activate
4. Mounting maximum insertion depth is 0.15".
5. Warranty: 1 year
6. Weight: 1.38 lb. / .63 kg

REV 10.05.99